

REMARKS/ARGUMENTS

Favorable reconsideration of the rejection of the sole Claim 24 is respectfully solicited.

Claim 24 is directed to a method of connecting refrigerant pipes of a multi-unit type air conditioner, including the steps of preparing a branch pipe joint body having a plurality of communication ports, and connecting the branch pipe joint body to refrigerant pipes through connecting pipes. According to a further feature of the invention, the connecting pipes are selected from a group of connecting pipes at an installation site, wherein each of a number of connecting pipes having a minimum inner diameter and a number of connecting pipes having a maximum inner diameter are smaller than a number of the connecting pipes having inner diameters other than the minimum and maximum inner diameters. For examples, referring to the non-limiting embodiment described in the paragraph beginning at line 9 of page 10 in the specification, the group of connecting pipes can comprise two connecting pipes having the minimum inner diameter (9.5 mm), two connecting pipes having the maximum inner diameter (19 mm) and five connecting pipes for each of two intermediate inner diameters. This makes it more likely to be able to cope with the demand for selecting a connecting pipe having the required inner diameter (page 10, lines 31-32).

Claim 24 stands rejected under 35 U.S.C. § 103 as being obvious over Japanese patent publication 11-241,798 in view of the EPO patent publication, 36,984. However, Applicant respectfully submits that no combination of the above references would teach or suggest the subject matter of Claim 24.

JP '798 was applied in the previous Office Action. As was explained in the response dated September 22, 2003, however, this reference (which was only considered to be background technology in the European search report) merely discloses refrigerant pipes 9 of the same inner diameter. There is no description in this reference of a number of connecting

pipes which is larger than the number of communication ports, nor is there a description of connecting pipes having different inner diameters. This reference thus provides no teaching with respect to the claimed feature whereby the number of connecting pipes in the group of connecting pipes is larger than the number of communication ports, and each of the number of connecting pipes having a minimum inner diameter and a number of connecting pipes having a maximum inner diameter are smaller than a number of the connecting pipes having inner diameters other than the minimum and maximum inner diameters.

In view of the arguments presented in the response of September 22, 2003, the Examiner has withdrawn the rejection based upon Japanese '798 in view of U.S. Patent 5,620,314 to Worton, and has instead rejected Claim 24 as being obvious over JP '798 in view of EP '984. However, EP '984 also lacks a teaching for modifying JP '798 in accordance with the method of the present invention. EP '984 discloses a connector for a water heater in which three connectors 21-23 each have different inner diameters. The Examiner has not alleged that the connectors 21-23 are selected from a group of connecting pipes which is larger than the number of communication ports 14-16, or that this reference teaches any relationship between a number of connecting pipes having a minimum inner diameter, a number of connecting pipes having a maximum inner diameter, and a number of connecting pipes having inner diameters between the minimum and maximum inner diameters. Indeed, EP '984 teaches nothing more than three ports, and three connectors mounted to the ports, each of the connectors having a different inner diameter.

The Examiner has recognized that EP '984 "does not disclose providing more of the other 21 connecting pipes than the connecting pipes having minimum 23 and maximum 22 inner diameters." Nonetheless, the Examiner has alleged that it "would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide additional connecting pipes 21 having inner diameters other than the minimum and maximum

inner diameters.” This is surprising since the Examiner has not alleged any teaching *in the reference* for so providing more of the connecting pipes 21 than the connecting pipes 22 and 23. Instead, the Examiner bases this allegation only upon the statement that “duplicating the components of a prior art reference is a design consideration within the skill of the art,” and cites In re Harza to support this proposition.

Applicant respectfully submits that the Examiner’s reliance on this rationale is misplaced for a number of reasons. First, the allegedly obvious modification which has been put forward by the Examiner does not constitute simply “duplicating the components of a prior art design.” Claim 24 does not merely recite the presence of plural numbers of the connectors having different inner diameters. Instead, Claim 24 recites a specific relationship for the connectors having different inner diameters, i.e., “the number of said connecting pipes in said group of connecting pipes is larger than the number of said communication ports, and is set such that each of a number of connecting pipes having a minimum inner diameter and a number of the connecting pipes having a maximum inner diameter are smaller than a number of the connecting pipes having inner diameters other than the minimum and maximum inner diameters.” **Thus, the rationale that duplication of parts is within the skill of the art is not at all applicable to Claim 24.**

Beyond this, the present application is clearly distinguishable from In re Harza. In that case, the prior art disclosed a single rib on each side of a web. The claims instead recited a plurality of ribs. The court stated that the “mere duplication of parts has no patentable significance unless a new and unexpected result is produced.” Thus, Harza is directed to the situation where the claim simply recites a plurality of the elements in the prior art and nothing more, and without any change in function. In contrast, the present Claim 24 not only recites that the number of connecting pipes in the group of connecting pipes is larger than the number of communication ports, but also recites a relationship amongst the number of

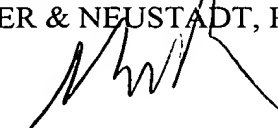
connecting pipes having a minimum inner diameter, the number of connecting pipes having a maximum outer diameter, and the number of connecting pipes having inner diameters other than the minimum and maximum inner diameters, this relationship making it possible to cope with the demand for selecting a connecting pipe having a required inner diameter (page 10, lines 31-32).

In summary, Claim 24 recites features which the Examiner has recognized are not taught in the prior art. The Examiner has not alleged that these features are taught by any combination of the references, but has merely dismissed these claim elements as being "a design consideration within the skill of the art." However, the Examiner's rationale for disregarding claim elements as being a "design consideration within the skill of the art," i.e., "duplicating the components of a prior art device," is not applicable to Claim 24 which does not merely recite the duplication of the components of a prior art device but instead recites specific relationships which are both not taught and provide advantageous results. Applicant therefore respectfully submits that Claim 24 clearly defines over any obvious combination of the above references.

There being no other rejections, Applicant respectfully solicits an early notice of allowability.

Respectfully submitted,

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